

Water Spouts.—Key West, 10th, 1.20 p. m., two water spouts were seen 7 miles WNW. from station, moving from E. to W.; one was complete, extending from a cumulo-stratus cloud to the water; the other was from the same cloud, but was only partially formed; it descended from the cloud but did not connect with the water; the phenomenon lasted for 25 minutes. Hatteras, N. C., 4th, 12 m., a large water spout was observed in the sound, about 3 miles north of station. When first observed, it was fully formed and extended from a heavy cumulo-stratus cloud, of black appearance, to the water, apparently a distance of half a mile. The spout was of a light grayish color near the water and of much darker color near the cloud; the water at its base seemed much agitated and was raised to a height of from 3 to 4 feet for several rods around. The water could be distinctly seen ascending the spout rapidly, with a spirally upward motion. The spout lasted for five minutes, when it broke; ten minutes elapsed before the column was fully drawn up and had disappeared within the cloud.

High Tides.—Indianola, 28th, 29th, 30th; Portsmouth, N. C., 3d, 13th; New Haven, 9th, 10th.

TEMPERATURE OF WATER.

The Temperature of Water, as observed in rivers and harbors at Signal Service stations, with the average depth at which observations were taken, is given in the table on the left-hand side of chart No. III. Owing to loss of instrument, observations at Charleston are wanting on the 9th, and from the 24th to the 30th.

ATMOSPHERIC ELECTRICITY.

Thunder-storms.—In the various districts they were reported as follows: New England, 1st to 7th, 11th, 13th, 22nd to 24th, 26th to 29th; Middle Atlantic states, 1st to 3rd, 5th, 9th to 12th, 22nd, 23rd, 25th to 29th; South Atlantic states, 3rd, 4th, 7th, 9th, 11th, 12th, 13th, 17th, 26th, 27th; Eastern Gulf states, 8th, 10th to 19th, 26th to 28th; Florida Peninsula, 1st to 7th, 10th to 16th, 19th, 21st, 22nd to 27th, 30th; Western Gulf states, 1st, 6th to 10th, 12th, 13th, 27th, 29th, 30th; Rio Grande valley, 1st, 6th, 7th, 8th, 10th, 11th, 13th, 27th, 29th, 30th; Ohio valley and Tennessee, 1st to 4th, 8th to 11th, 13th, 14th, 18th, 19th, 21st, 23rd to 28th, Lower Lake region, 1st to 5th, 9th, 10th, 12th, 22nd to 27th; Upper Lake region, 1st to 6th, 8th to 10th, 14th to 18th, 21st to 30th; Upper Mississippi valley, 1st to 12th, 14th, 15th, 21st to 30th; Missouri valley, 1st to 6th, 9th to 15th, 19th, 22nd to 30th; extreme Northwest, 3rd, 4th, 9th, 11th, 13th, 19th, 20th, 24th; Northern Slope, 1st to 4th, 18th, 19th, 21st to 23rd, 28th, 29th; Middle Slope, 1st, 5th, 6th, 9th, 18th, 22nd, 23rd, 25th, 26th to 29th; Southern Slope, 5th, 6th, 12th, 26th to 29th; Southern Plateau, 3rd, 4th, 10th to 13th, 28th; Middle Plateau, 23rd; Northern Plateau, 2nd, 4th, 8th, 13th, 17th, 24th; North Pacific coast region, 4th, 8th, 17th, 22nd, 23rd; Middle Pacific coast region, 1st, 2nd, 21st to 27th.

Atmospheric Electricity Interfering with Telegraphic Communication.—Dodge City, Kan., 29th; Ft. Elliott, Tex., 28th; Jacksboro, Tex., 7th, 27th and 29th; Eagle Pass, Tex., 8th and 29th; Brackettville, Tex., 30th; Bismarck, Dak., 19th.

Zodiacal Light.—Nashville, 5th, 6th, 11th, 12th, 16th, 17th, 19th to 25th and 30th; Wood's Holl, Mass., 15th and 16th; New Corydon, Ind., 21st, 22d, 24th, 26th, 27th and 30th; Monticello, Ia., 1st.

Auroras.—The most remarkable display for several years occurred on the 12th, 13th and 14th, and the line of observation was continuous from Sydney, N. S., westward to Umatilla, Or. Observers reported its appearance as far south as Louisville and northward to St. Vincent, Minn. At several stations in Dakota and Minnesota the display began on the 11th, and probably on this date the districts eastward to the Atlantic would have reported the same phenomenon had it not been for the heavy cloudiness which prevailed from the Lake region eastward to Newfoundland, accompanying the progress of low area No. II. It is interesting to note in connection with this great electrical disturbance that on precisely the same dates, but during the previous month of August a remarkable auroral display was observed very extensively in England and Scotland. An observer at the Stonyhurst Observatory describes it as recalling the magnificent displays of 1869, 1870 and 1872, while the play of the magnets was one of the most violent ever recorded at that observatory. On the 11th, 12th and 13th of August observers of the sun found indications of intense commotion; sunspots were numerous, large and active and protuberances shot up from the sun's surface, with increased force and velocity. The earth appeared to make instantaneous response to the solar storm and a magnetic disturbance suddenly commenced by an unusual exhibition of earth currents. At the Greenwich Observatory no such magnetic disturbance had been recorded for many years. This auroral display was not only very extensive but exceedingly brilliant, and many of its manifestations wonderfully strange; in the United States but two stations reported, viz: Duluth, 13th, 11 p. m.; St. Vincent, 12th, 10 p. m. Concerning the display for the present month (September) the following stations, with few exceptions, report the time of appearance and disappearance: Sydney, C. B. I., 14th. Halifax, N. S., 13th, 14th. Eastport, Me., 12th, from 8 to 11 p. m.; 13th, from 8 to 10 p. m.; 14th, from 7 to 9 p. m. Bangor, Me., 12th, from early dusk until midnight. Cornish Me., 14th. Dexter, Me., 12th, 7 to 9 p. m.; 14th, 8 to 10 p. m. Mt. Washington, N. H., 12th, 7 to 10.20 p. m.; 13th, 1.10 to 4 a. m., and from 7 to 8.40 p. m. Burlington, Vt., 12th, 7.15 to 9 p. m.; 14th, 8.30 to 10.30 p. m. Newport, Vt., 12th, 8 to 9 p. m.